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PLANNING & COUNTER CORV

Coordinated Resource Management Plan

Laguna de Santa Rosa

April 1995
Next Revision 1996



PLANNING & COUNSEL CORP.

Coordinated Resource Management Plan

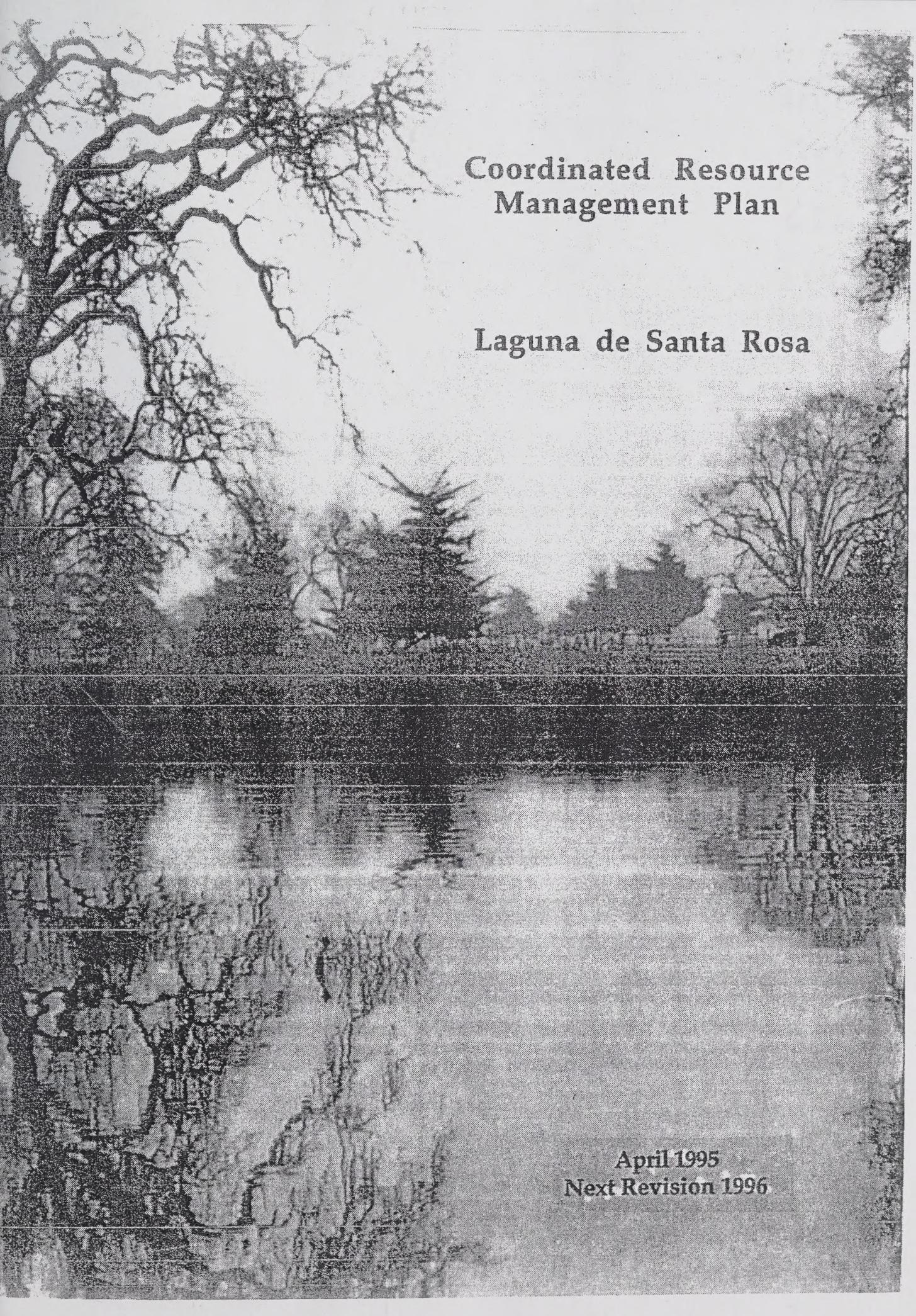
Laguna de Santa Rosa

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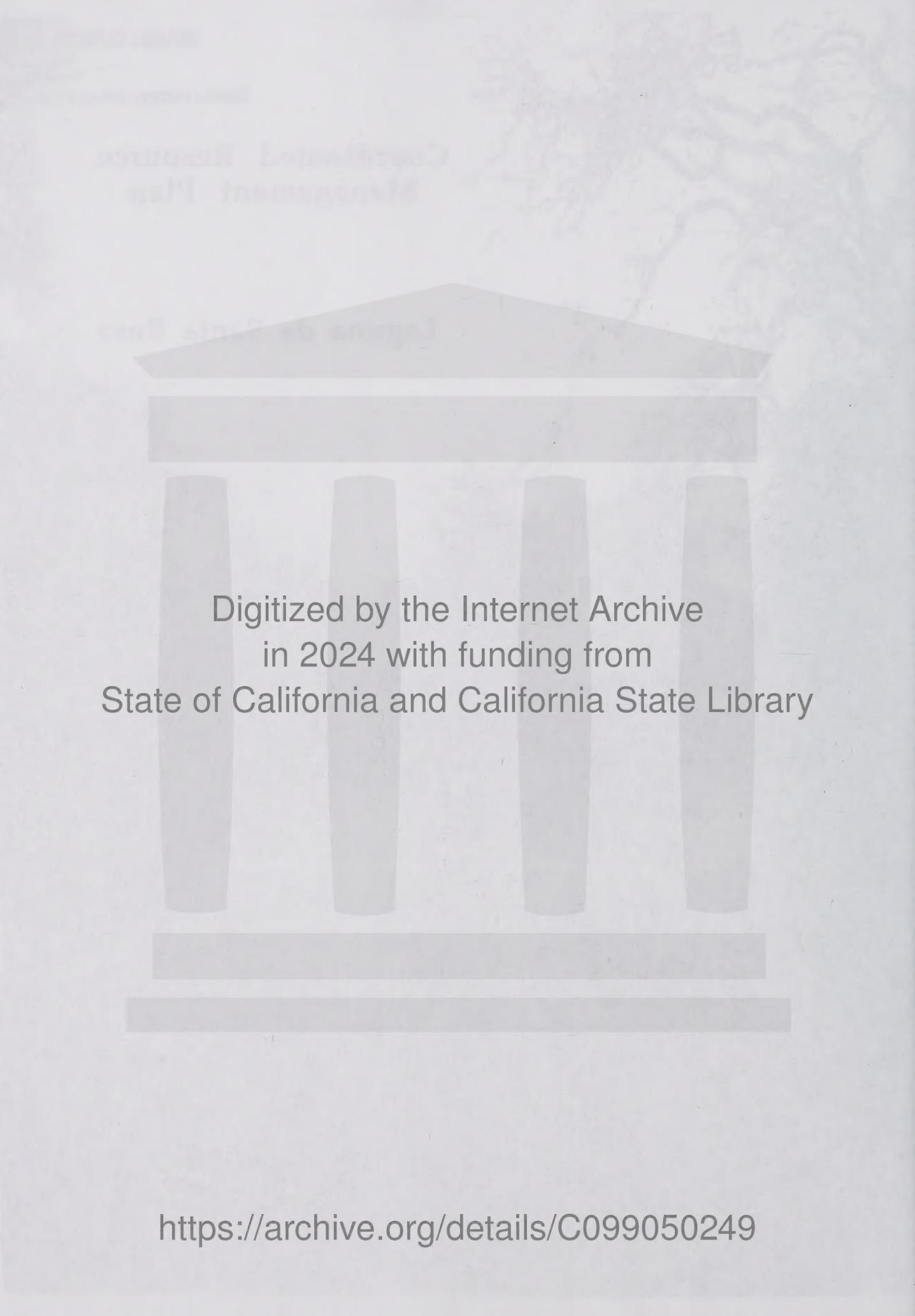
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**Coordinated Resource
Management Plan**

Laguna de Santa Rosa

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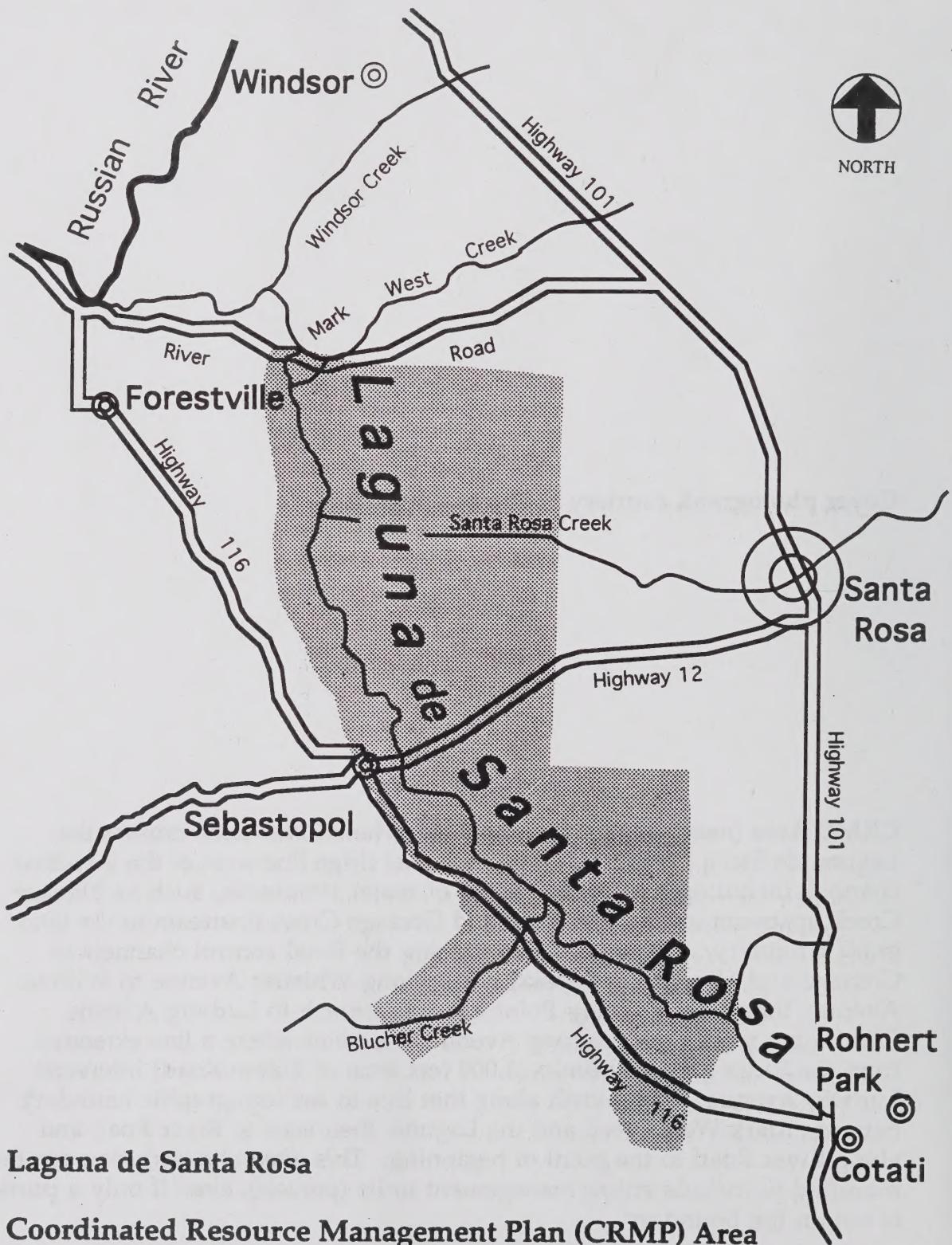
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Cover photograph courtesy of Patricia Appleton.

CRMP Area (next page): From the point where River Road crosses the Laguna de Santa Rosa, south along the first ridge line west of the low-flow channel, including the lower portion of major tributaries, such as Blucher Creek upstream to Canfield Road and Gossage Creek upstream to the land grant boundary. Turning northeast along the flood control channels of Gossage and Hinebaugh Creeks; north along Whistler Avenue to Wilfred Avenue; then west to Stony Point Road and north to Ludwig Avenue. Continuing west along Ludwig Avenue to a point where a line extended from the Santa Rosa city limits (1,000 feet west of Fulton Road) intersects Ludwig Avenue. Then north along that line to the topographic boundary between Mark West Creek and the Laguna, then west to River Road and along River Road to the point of beginning. This general description can be modified to include entire management units (parcels), even if only a portion is within the boundary.



Laguna de Santa Rosa

Coordinated Resource Management Plan (CRMP) Area

Coordinated Resource Management Plan

Laguna de Santa Rosa, Sonoma County

April 1995
Next Revision: Nov. 1996

Location and description.

The Laguna CRMP area covers the western half of the Santa Rosa Plain. It lies at the lower end of a watershed approximately 250 square miles in size. In addition to being one of the largest basins in the Russian River system, it is the most urbanized.

Although the CRMP area lies outside the urban boundaries of the cities of Santa Rosa, Rohnert Park and Cotati, it includes the eastern fringe of Sebastopol and exclaves of Santa Rosa. Pockets of rural residential development occur in the CRMP area, but most of the land use is agricultural, with dairies and vineyards predominating. At one time the second-largest wetland in coastal Northern California, the Laguna is now often seen as a narrow riparian corridor 11 miles long, or as a floodplain of 7,800 acres. But when defined in terms of its resources, especially biotic, agricultural and open space, the Laguna includes a larger area of approximately 33 square miles (see map).

Area involved.

| | |
|--|---------------------|
| Private land | 18,010 acres |
| Public land | 2,920 acres* |
| City of Santa Rosa (Subregional Wastewater Reclamation System) | (1,860) |
| Calif. Dept. of Fish & Game | (560)** |
| County of Sonoma | (±400) |
| City of Sebastopol | (100) |
| Total Area: | 20,930 acres |

*Does not include road corridors or conservation easements.

**Includes purchases that have been negotiated but may not yet be final.

Resource uses.

Land uses in the Laguna are not necessarily defined by land ownership. More than one-third of the public land is irrigated and used for agricultural purposes. On the other hand, some private land is unimproved and provides important wildlife habitat. About 14,500 acres, or 70 percent of the total Laguna CRMP area is in agriculture; about 40 percent of the agricultural acreage is irrigated. Of the remaining area, about 10 percent is rural residential; another 10 percent is water, natural areas and unimproved lands; and the remaining 10 percent is in other uses such as roads, a golf course and the sewage treatment plant.

The following resources are those that the Task Force determined to be an essential part of the Laguna. These resources are dependent on the unique natural qualities of the Laguna de Santa Rosa, and in turn define it as a distinctive geographic feature.

- Agricultural resources — traditionally resident-owner, small family farms.
- Biotic resources — high diversity; rare and endangered plants and animals.
- Cultural resources — more than 70 recorded sites, some with 8,000 years continuous occupancy.
- Educational resources — hands-on opportunities in art, science, history and agriculture.
- Open space resources — community separator; scenic vistas.
- Recreational resources — multi-use trail; hunting; fishing; birding; canoeing.
- Water resources — floodplain; water supply; aquatic & wetland habitats.

The need to coordinate use of these resources in a balanced and equitable way has brought many interested people together to develop this plan.

Planning participants.

Process Coordinator: Laguna de Santa Rosa Foundation
P.O. Box 797
Sebastopol, CA 95473

Task Force Members:

| | |
|----------------------------|---|
| Brenda Adelman | Russian River Watershed Protection Comm. |
| Bob Anderson | United Winegrowers of Sonoma County |
| Fred Beeman | Friends of the Russian River |
| Phil Bertoli | Gold Ridge Resource Conservation District |
| Allan Buckmann | Department of Fish and Game |
| Maria Cipriani | So. Co. Ag. Preservation & Open Space Dist. |
| Ginny Collier | Landowner |
| John Cummings | Natural Resources Consultant |
| Charles Dill | Marin-Sonoma Mosquito Abatement Dist. |
| Karen Gaffney | Sotoyome-Santa Rosa Resource Cons. Dist. & Circuit Rider Productions, Inc. |
| Isadore Fomasi (deceased) | Landowner |
| Jerry Hlavac | Landowner |
| Earl Holtz | Western United Dairymen |
| Richard King/Gene Guenza | Natural Resources (Soil) Conservation Service |
| Robert Klamt/Cecile Morris | Regional Water Quality Control Board |
| John Kottage | Sonoma Co. Dept. of Trans. & Public Works |
| Michael Kyes | Sebastopol Chamber of Commerce |
| Andrew Lee/I-Ming Cheng | Department of Water Resource |
| Sarah McNair | City of Cotati |
| Richard Merriss | Redwood Ornithological Society & Madrone Audubon Society |
| Bob Morrison/Renee Webber | Sonoma County Water Agency |
| Michael Murphy | Sonoma County Horse Council |
| Ellen O'Neil | Landowner |
| Jim Olmsted | So. County Permit & Resource Management (Planning) Department |
| Chuck Regalia | Santa Rosa Community Development Dept. |
| Bill Roventini | City of Sebastopol |
| Mike Sherrell | Horseman |
| Susan Simpson | Calif. Dept. of Transportation |
| Linda Spiro/Ron Brust | City of Rohnert Park |
| Scott Stinebaugh | Santa Rosa Utilities Department & Subregional Wastewater Reclamation System |
| Joan Vilms | Sonoma Co. Fish & Wildlife Advisory Board |
| Richard Wells | Landowner |

Other Participants:

California Native Plant Society, Milo Baker Chapter
Commins Consulting
Golden Bear Biostudies
Institute for Community Planning Assistance, Sonoma State University
Merritt Smith Consulting
Prunuske Chatham, Inc.
Sonoma County Trails Council
University of California Cooperative Extension Service
Ya-Ka-Ama

Funding:

Sonoma County Water Agency
Santa Rosa Subregional Wastewater Reclamation System

Resource Management Issues

The Task Force selected the following issues as those to be addressed in the current Plan. As with other parts of the Plan, this section will be updated as needed during periodic Task Force review meetings.

Agricultural Resources:

1. Changes in land use from agriculture to more intensive, urban oriented products and services.
2. Distrust and lack of communication between farmers and other stakeholders.
3. Lack of choices in management decisions due to increased regulations.
4. Trespass and increased liability due to unauthorized recreational use.

Biotic Resources:

1. Loss and fragmentation of native habitat.
2. Loss of native species and reduction of populations.
3. Loss of diversity and complexity.
4. Impaired water quality.
5. Poor understanding of the natural ecosystem.
6. Single-purpose monitoring and inadequate information exchange.
7. Inability to predict the long-term, cumulative effects of human activities.
8. Lack of general restoration guidelines and overall goals.

Open Space Resources:

1. Lack of appreciation of scenic value among agencies.
2. Poor definition of elements that contribute to open space and scenic values.
3. Need to preserve native habitats and land-extensive agriculture.

Recreational/Educational/Cultural Resources:

1. Lack of public access and facilities (i.e., parking, signage, maps).
2. Lack of coordinated trail planning.
3. Need for management strategies to prevent overuse and loss of resource values (biotic, agricultural, scenic).
4. Lack of educational opportunities and facilities.
5. Loss of cultural resources sites.

Water Resources:

1. Water quality:
 - a. water pollution from point and non-point sources as it impacts water quality.
 - b. lack of riparian vegetation as it relates to water quality.
 - c. grazing in riparian areas as it affects channel stability and water quality.
 - d. management for flood control (e.g., channel clearing) as it impacts water quality (*see also* 2a. below).
 - e. sedimentation as source of pollutants.
 - f. effects of wastewater discharge and irrigation runoff on water quality.
 - g. impacts of water diversion in reducing summer flows, especially well water pumpage on west side.
2. Floodplain management:
 - a. design and management of flood control channels as they affect water quality (*see also* 1b. and 1d. above).
 - b. sedimentation as a process contributing to lost habitat (e.g., pools), and reducing channel and floodplain capacity.
 - c. need to preserve County no-net-fill policy.
 - d. effects of changes in natural flow regime from urbanized areas.

Planning/Management Objectives

The Task Force determined that these 10 objectives are the overall, long-term goals of the Plan. The ultimate success of the plan depends on how fully we achieve these goals. The following pages explain the actions we propose to achieve these objectives.

- Coordinate resource management.
- Preserve, restore and enhance native habitats.
- Accomplish recovery of native species.
- Assist landowners in conserving and enhancing natural resources.
- Support the long-term viability of agriculture.
- Improve water quality.
- Improve integrated floodplain management.
- Improve public access and educational opportunities.
- Protect cultural resources.
- Preserve and enhance scenic values.

- **Coordinate resource management.**

The resource management issues identified in the previous section result from a combination of events and practices by many users over time. Consequently the resolution of these issues is best made jointly and cooperatively. The purpose of this plan is to encourage all interested parties to work together to achieve the ten planning/management objectives.

Actions proposed to achieve the objective:

- A. Encourage public agencies to coordinate policies and apply regulations in ways that promote the objectives of this plan.
- B. Implement the plan in a balanced way, so that progress occurs equitably among all objectives when possible, and does not cause harm to upstream or downstream resources.
- C. Seek opportunities to coordinate the plan objectives outside the CRMP area, especially in the watershed and downstream areas.
- D. Develop funding and cost sharing in joint projects that achieve multiple plan objectives.
- E. Meet annually as a Task Force composed of all interested parties to discuss problems of implementation, to summarize accomplishments, to revise the plan and to set priorities for implementation strategies.

- **Preserve, restore and enhance native habitats**

Human activities over the last 150 years have impacted and changed the Laguna's ecosystem. Its biotic resources have been degraded: native habitats have been fragmented and isolated; native plants and animals have been restricted or eliminated. The purpose of this objective is to achieve an ecosystem in the Laguna that is biologically healthy and self sustaining.

Actions proposed to achieve the objective:

- A. Develop a shared, long-term vision for the preservation, restoration and enhancement of native habitats.
- B. Preserve, restore and enhance habitats for optimum diversity.
- C. Increase native habitat area and its values.
- D. Seek alternatives to activities and land uses that degrade natural resources.
- E. Improve water quality to support a diverse and healthy aquatic life.

- **Accomplish the recovery of native species**

Many native plant and animal species of the Laguna have suffered consistent population drops, and some species having been extirpated completely. More than 14 plants and animals that currently or historically lived here are listed as threatened, rare or endangered. The purpose of this objective is to protect and establish populations of native species that are appropriate, diverse and self sustaining.

Actions proposed to achieve the objective:

- A. Develop a shared, long-term vision for the preservation, restoration and enhancement of native plant and animal species.
- B. Preserve, restore and enhance native species for optimum diversity.
- C. Increase native species population numbers and diversity.
- D. Plant native species appropriate to the Laguna and, to the extent possible, of local genetic stock, for restoration and enhancement projects.
- E. Seek opportunities for preservation, restoration and enhancement.

- **Assist landowners in conserving and enhancing natural resources.**

Public ownership of land has increased during the last 20 years; however, private ownership will continue to be the dominant pattern in the near future. The objectives of this plan will be achieved only through accommodation of varied ownership needs. The purpose of this goal is to increase the diversity of natural resources by helping all landowners develop conservation plans that are consistent with their economic goals, in the case of private landowners, or with their public trust obligations, in the case of public landowners.

Actions proposed to achieve the objective:

- A. Encourage the development of individual resource management plans through cost sharing and other incentive programs.
- B. Encourage the implementation of individual resource management plans through continued technical support and personal recognition of landowners.
- C. Coordinate and promote the idea of individual resource management plans among public agencies.
- D. Seek cooperation among government agencies so that landowners who achieve goals set by their individual resource management plans are not subject to increased regulatory burdens as a result of their conservation and/or enhancement efforts.
- E. Support and expand programs that help communication among landowners, and between landowners and public agencies.

- **Support the long-term viability of agriculture.**

Urbanization of the watershed has pushed agricultural activities into an area centered on the Laguna. With the rise in land values and the availability of reclaimed water, many ranchers and farmers have converted their land to more intensive uses for economic reasons. Some of these conversions have actually eliminated agriculture in its strictest sense (see glossary). The purpose of this objective is to maintain enough land in the production of food and fiber to assure the long-term economic viability of agriculture.

Actions proposed to achieve the objective:

- A. Educate public agencies and the general public about the history of agricultural use in the Laguna, and the value of sustaining a viable agricultural economy.
- B. Maintain a rural residential buffer between the urban boundaries and the core agricultural area of the Laguna.
- C. Preserve the breadth of options available to individual landowners in managing their lands for long-term goals.
- D. Assist smaller landowners to qualify jointly for assistance programs that encourage sustainable resource use.

- **Improve water quality.**

Changes in Laguna hydrology and watershed land use over the past 150 years have degraded water quality. This objective seeks to improve water quality so that the Laguna and its tributaries can fully support, at all times and in all locations, the beneficial uses defined in the RWQCB Basin Plan (see glossary).

Actions proposed to achieve the objective:

- A. Encourage programs that reduce nutrient loading to the Laguna and its tributaries.
- B. Encourage programs that reduce water temperature in the Laguna and its tributaries
- C. Encourage programs that reduce sediment inputs to the Laguna and its tributaries.
- D. Encourage programs that identify, reduce and/or eliminate toxic inputs to the Laguna and its tributaries.
- E. Protect the quantity and quality of natural discharge during the seasonal low-flow period in the Laguna de Santa Rosa and its tributaries.
- F. Coordinate point source discharges to provide flushing flows or other benefits to floodplain resources.

- **Improve integrated floodplain management.**

Floodplain management has traditionally meant flood control with an emphasis on constructed improvements. The purpose of this objective is to provide opportunities to integrate consideration of all resources into floodplain management and to preserve the full spectrum of natural floodplain functions (see glossary).

Actions proposed to achieve the objective:

- A. Protect and restore native riparian vegetation along the Laguna de Santa Rosa and its tributaries.
- B. Protect and restore wetlands in order to enhance natural floodplain functions.
- C. Ensure that flood control channels in the Laguna and its tributaries incorporate multiple purposes and uses.
- D. Coordinate and conduct channel maintenance activities to minimize adverse impacts on Laguna resources.
- E. Maintain flood-carrying and storage capacities of the Laguna and its tributaries.

- **Improve public access and educational opportunities.**

Lack of public access limits knowledge about and appreciation of the Laguna. It also causes increased trespass as rising urban populations seek access to open space areas. On agricultural lands, trespass threatens economic viability by increasing liability costs and reducing productivity. In natural areas, trespass threatens preservation and restoration efforts. The purpose of this objective is to encourage public use that supports the other plan objectives and does not degrade Laguna resources (see *recreation* in glossary).

Actions proposed to achieve the objective:

- A. Seek ways to involve members of the general public, schools and community groups in all phases of Laguna planning, conservation and restoration.
- B. Improve access to information about the Laguna with programs and projects that reach out to more and more people through time.
- C. Coordinate recreational planning to encourage access at specific points in the Laguna that show a variety of resource values, while taking pressure off of private lands and sensitive areas.
- D. Encourage recreational uses compatible with the protection and enhancement of Laguna resources, so that recreation does not displace agricultural uses or opportunities for habitat restoration.

- **Protect cultural resources.**

Evidence of the 9,000 years of Native American residence in the Laguna is invisible to the modern observer. This objective seeks to preserve artifacts and sites important to the Pomo people, and to increase understanding of Native American resource use and habitat management.

Actions proposed to achieve the objective:

- A. Encourage uses that do not threaten the protection and integrity of cultural resource sites.
- B. Seek opportunities to include the Native American community in traditional Pomo/Miwok uses during the planning and resource management process.
- C. Develop recreational and interpretive areas that will educate users about those aspects of Pomo culture related to the Laguna.

- **Preserve and enhance scenic values.**

Early descriptions of the Santa Rosa Plain and Laguna tell of broad vistas, vast oak woodlands, and wildlife beyond counting. Even today, scale and proportion in the Laguna are set by the size of the remaining 200-year-old oaks. The purpose of this objective is to preserve and enhance the value of the Laguna landscape by retaining this natural scale and proportion.

- A. Preserve and maintain, and enhance where possible, the existing open and natural characteristics of the Laguna.
- B. Recognize the visual significance of the Laguna's agricultural and natural landscape, particularly as it contributes to the quality of life for Sonoma County.
- C. Recognize the inherent value of the natural plant and animal communities supported by and dependent upon the Laguna ecosystem.
- D. Encourage the cities and county to focus growth where it currently exists and to discourage development in existing open areas.

Implementation Strategies

The following nine strategies have been selected by the Task Force to implement the planning/management objectives listed in the previous section. To be selected, a strategy must accomplish three or more objectives, and requires cooperation among interested stakeholders in order to be implemented.

- A. Individual landowner, resource management plans.
- B. Revegetation of riparian corridor.
- C. Livestock management.
- D. Flood channel enhancement.
- E. Sediment reduction.
- F. Restoration and enhancement of historic wetlands.
- G. Preservation, restoration and enhancement of oak/vernal pool/grassland complex.
- H. Public access and trails plan.
- I. Public acquisition of land from willing sellers.

A. Individual landowner resource management plans.

Objectives: Assist landowners in conserving and enhancing natural resources; support long-term viability of agriculture; restore native habitats; help recovery of native species; improve water quality; protect cultural resources; preserve scenic values; coordinate resource management.

Task: Outline how individual landowners (public and private) can manage land uses in order to achieve multiple objectives. Objectives are chosen by each landowner after defining long-term goals. Each plan takes normal operational elements, such as storm runoff, animal waste, forage and soils, and shows how they can be managed, or alternatives developed, to preserve, restore or enhance a natural resource(s), such as native waterfowl, oaks, frogs or vernal pools. Also included in plans: appropriate emergency responses, self-monitoring tasks and quantitative goals.

(1) Public land -- develop landowner management plans that reflect public trust obligations and propose alternatives to activities that have degraded natural resources in the past; incorporate elements of plan, such as livestock management guidelines, into leases.

(2) Private land -- reach landowners who are interested in enhancing natural resources; cooperate to develop demonstration plan for a private ranch or farm.

Participants: Cities of Santa Rosa and Sebastopol; Cal. Dept. of Fish & Game; interested private landowners; NRCS; RCDs.

Potential Funding Sources:

(1) Cash/grants: Cal. Dept. of Forestry and Fire Protection (SIP); EPA; Cons. Farm Serv. Ag.; private foundations.

(2) In-kind services for plan review: Marin-Sonoma Animal Waste Committee; U.C. Coop. Extension; Marin-Sonoma MAD; Cal. Dept. of Fish & Game; So. Co. Fish & Wildlife Advisory Bd.; Calif. Native Plant Soc.; Redwood Ornithological Soc.

Time to Accomplish:

Public lands -- 2 plans completed by 1996
Private lands -- 1 plan completed by 1996

B. Revegetation of riparian corridor.

Objectives: Improve water quality; improve integrated floodplain management; enhance native habitats; assist recovery of species; enhance scenic values.

Task: Establish and protect native riparian vegetation along the stream channels and in the floodplains of the CRMP area where it can contribute to: the protection of water quality from thermal, nutrient or sediment pollution; the improvement of channel and bank structure; the enhancement of wildlife and aquatic habitat; the improvement of soil and floodplain infiltration capacity; and/or the improvement of scenic values.

Participants: Cities of Santa Rosa and Sebastopol; So. Co. Water Agency; Dept. of Fish & Game; Laguna Foundation; interested private landowners.

Potential Funding Sources:

- (1) Cash/grants: Cal. Dept of Forestry & Fire Protection; ReLeaf; CalTrans; Sonoma County Community Foundation.
- (2) In-kind services for planting and maintenance: Student volunteers, including SSU interns; Laguna Foundation; Calif. Native Plant Soc.

Time to Accomplish: Public lands -- ongoing; 500 plants in 1995
 Private lands -- ongoing; 50 plants in 1995

C. Livestock management.

Objectives: Improve water quality; improve integrated floodplain management; enhance native habitat; assist landowners with conservation practices.

Task: Manage livestock use of riparian areas as part of a vegetation management program, with fencing, season of use and stocking that can be demonstrated to accomplish stable channel configuration and support intact riparian corridors that protect water quality and wildlife habitat. Manage livestock use of irrigated pasture through best management practices (BMPs) that protect soil structure and forage vigor.

(1) Public land -- incorporate BMP guidelines into individual resource management plans; build and maintain appropriate fencing; inspect leasees/users for compliance; develop demonstration project under the management of an agricultural leasee.

(2) Private land -- develop riparian management plans with the assistance of NRCS and technical consultants.

Participants: Cities of Santa Rosa and Sebastopol; interested private landowners; NRCS; RCDs; Dept. of Fish & Game; Marin-Sonoma MAD.

Potential Funding Sources:

(1) Cash/grants: Cons. Farm Ser. Ag.; County Fish & Wildlife Advisory Board; lease revenues; RWQCB and EPA (319H or other nonpoint source funds).

(2) In-kind services for fence building and maintenance: FFA; 4H; Horse Council; Honor Farm crews; West County Community Services work crews.

Time to Accomplish:

Public lands -- demonstration project, 1995-96
Private lands -- ongoing

D. Flood channel enhancement.

Objectives: Improve integrated floodplain management; enhance native habitats; improve water quality; enhance scenic values; improve public access; coordinate resource management.

Task: Inventory and characterize all flood control channels within the CRMP area, and develop options for each reach that will increase resource values without increasing flood hazards. Develop priorities for channel enhancements. Establish a system to review future channel improvements in the CRMP area that encourages multipurpose floodplain management.

Participants: So. Co. Water Agency; So. Co. Fish & Wildlife Advisory Board; Dept. of Fish & Game; Cal. Dept. of Water Res.

Potential Funding Sources:

- (1) Cash/grants: So. Co. Water Ag.; Urban Streams Program; RWQCB; EPA.
- (2) In-kind services for inventory and coordination: Laguna Foundation.

Time to Accomplish:

Plan -- 1995

Improvements -- ongoing; begin 1996

E. Sediment reduction.

Objectives: Improve water quality; improve integrated floodplain management; preserve native habitats; coordinate resource management.

Task: Inventory stream channels, analyze air photos, and use other available information to determine local sources of sediment in the CRMP area. Develop options to reduce future erosion from source areas, and implement in cooperation with the landowners. Use information about historic sedimentation rates (Monitoring Objective 2.) to determine the percentage of sediment coming from outside the CRMP area, and coordinate with watershed efforts to reduce erosion and sedimentation.

(1) Public land -- repair sediment source areas using options that incorporate BMPs and habitat enhancement elements.

(2) Private land -- develop sediment source reduction plans with the assistance of NRCS, RCD and technical consultants.

Participants: City of Santa Rosa; So. Co. Water Agency; interested private landowners; NRCS; RCDs; Dept. of Fish & Game.

Potential Funding Sources:

(1) Cash/grants: Cons. Farm Serv. Ag.; Urban Streams Program; RWQCB & EPA; mitigation projects.

(2) In-kind services for erosion control installation: FFA; Honor Farm crew West County Community Services work crews.

Time to Accomplish: Public lands -- inventory 1995; begin projects 1996.
 Private lands -- ongoing

F. Restoration and enhancement of historic wetlands.

Objectives: Enhance native habitats; assist recovery of native species; improve integrated floodplain management; enhance scenic values; improve educational opportunities; coordinate resource management.

Task: Restore historic wetlands for optimum diversity and long-term sustainability, on lands that become available from willing owners. Designs should minimize maintenance needs; individual projects should fit into a coordinated plan of wetland enhancement that restores individual habitats to create a healthy Laguna ecosystem.

(1) Public land -- define restoration sites in individual management plans; coordinate restoration goals among all public landowners in the CRMP area to maximize habitat diversity and continuity.

(2) Private land -- provide technical assistance to landowners who want to preserve, restore or enhance wetlands.

Participants: Pacific Coast Joint Venture group; City of Sebastopol; interested private landowners; Marin-Sonoma MAD.

Potential Funding Sources:

(1) Cash/grants: So. Co. Fish & Wildlife Adv. Bd; Cal. Dept. of Fish & Game; U.S. Fish & Wildlife Serv; CalTrans; Ducks Unlimited; mitigation funds.

(2) In-kind services for planning, installation, monitoring: Circuit Rider Prod.; Madrone Audubon; Ducks Unlimited; Laguna Foundation; Sonoma Land Trust; students, including SSU interns.

Time to Accomplish: Public lands -- Pac. Coast Jnt. Vent. site completed by early 1996
Private lands -- ongoing; as available

G. Preservation, restoration and enhancement of oak/vernal pool/grassland complex.

Objectives: Enhance native habitats; assist recovery of native species; enhance scenic values; improve educational opportunities; coordinate resource management.

Task: Preserve or restore historic complex for optimum diversity and long-term sustainability, on lands that become available from willing owners. Designs should minimize maintenance needs; individual projects should fit into a coordinated plan of enhancement that restores individual habitats to create a healthy Laguna ecosystem.

(1) Public land -- define preservation/restoration/enhancement sites in individual management plans; coordinate restoration goals among all public landowners in the CRMP area to maximize habitat diversity and continuity; develop demonstration project for restoration of native grasses on grazing land.

(2) Private land -- provide technical assistance to landowners who want to preserve, restore or enhance oak/vernal pool/grassland complex.

Participants: Vernal Pools Task Force; So. Co. Fish & Wildlife Adv. Bd.; interested public and private landowners.

Potential Funding Sources:

(1) Cash/grants: U.S. Fish & Wildlife Serv; USDA; state funds/bonds; mitigation funds.

(2) In-kind services for landowner outreach/education: Laguna Foundation; U.C. Coop. Ext; RCDs.

Time to Accomplish:

Public lands -- identify demonstration project, 1995
Private lands -- ongoing, as available

H. Public Access and Trails Plan.

Objectives: Improve public access and educational opportunities; preserve and protect native habitats and cultural resources; support long-term viability of agriculture; coordinate resource management.

Task: Develop a coordinated public access and trails plan that: provides access to appropriate locations in the CRMP area where public use will not degrade other resource values; defines the trail hierarchy appropriate to an area; directs public use away from active agricultural operations and sensitive habitats; increases educational opportunities for broad segments of the community; provides accessibility for traditional uses by the Native American community; develops shared maintenance and monitoring strategies; involves community volunteers.

(1) Public land -- use parallel activities to develop and coordinate plan: Sebastopol Laguna Park planning; road/highway improvements; individual landowner plans; review of flood control channels.

(2) Private land -- seek opportunities to increase public access through easements or outright purchase from willing sellers.

Participants: All public landowners; interested private landowners.

Potential Funding Sources:

(1) Cash/grants: Cal. Wildlife Cons. Bd; So. Co. Ag. Pres. & Open Space Dist; So. Co. Regional Parks; CalTrans and other mitigation funds; federal transportation funds; private foundations.

(2) In-kind services for planning, installation, maintenance & monitoring: Horse Council; Honor Farm crews; West County Community Services work crews; students/school groups; civic and service groups, such as Rotary, Lions, chambers of commerce; non-profits such as Laguna Foundation, Trails Council, Sonoma Land Trust.

Time to Accomplish: Public lands -- trails plan & map for Sebastopol area, end of 1996

I. Public acquisition of land from willing sellers.

Objectives: All.

Task: Purchase conservation easements or land outright from willing seller where lands are valuable for agriculture and potentially high in habitat value; contain species of concern; can increase continuity of restored areas or public access provide community separators; or preserve scenic values or cultural resources. Purchases can reduce the pressure on remaining private landowners to preserve public trust resources, improving the long-term viability of agriculture.

Participants: Interested private landowners; Cities of Santa Rosa & Sebastopol; Ag. Pres. & Open Space Dist.; Cal. Dept. of Fish & Game.

Potential Funding Sources: Cal. Wildlife Cons. Bd; So. Co. Ag. Pres. & Open Space Dist; Nature Conservancy; Trust for Public Land; CalTrans and other mitigation funds.

Time to Accomplish: Ongoing, as land and funds are available

Monitoring

The Bibliography (Appendix B) lists a considerable amount of information about the Laguna collected during the last 30 years. Gathered at different times and locations, by agencies and individuals for varying purposes; and with varying quality assurance/quality controls (QAQC), these data are nevertheless valuable in describing certain baseline conditions in the Laguna.

An increased understanding of current conditions will make it possible to design effective monitoring objectives in the future, and allows us to ask the "big picture" questions that may be ignored during specific monitoring programs. Therefore, this monitoring section emphasizes the need to collect, integrate and interpret existing data before new monitoring efforts are recommended. Monitoring issues will be modified as needed during periodic reviews by the Task Force.

1. Objective: Create a data base and develop baseline information on bird populations in the Laguna area.

Methods: Design data base; develop funding; define maintenance responsibilities.

Responsible: Non-profit organizations (e.g., Redwood Ornithological Society; Madrone Audubon; Ducks Unlimited; California Waterfowl Assn.); public agencies (e.g. So. Co. Fish & Wildlife Advisory Board; Cal. Department of Fish & Game; U.S. Fish and Wildlife Service); educational institutions (e.g., SSU Biology Department and GIS Center); and individual community volunteers.

Date: 1995-96.

2. Objective: Collect and organize information about historic sedimentation rates at various locations in the Laguna area.

Methods: Develop funding; collate empirical and design information; conduct and record oral interviews; collect and interpret historic photographs; map data.

Responsible: public agencies (e.g., So. Co. Water Agency, Dept. of Water Resources, EPA); non-profit organizations (e.g., Laguna Foundation; West Sonoma Co. Historical Society); educational institutions (e.g., SSU Env. Studies & Planning Dept.; GIS Center); and cooperating landowners.

Date: 1995-96.

3. Objective: Create a data base and develop trend information on revegetation and planting projects in the Laguna area.

Methods: Design data base; develop funding; define maintenance responsibilities.

Responsible: public agencies (e.g., cities of Santa Rosa & Sebastopol; So. Co. Water Agency; Cal. Dept. of Fish & Game; Cal. Dept. of Forestry & Fire Protection; U.C. Extension); non-profit organizations (e.g., Circuit Rider Productions; Laguna Foundation; Native Plant Society; ReLeaf); educational institutions (e.g., Sebastopol Union School Dist; SSU Env. Studies & Planning Dept.; SRJC Biology Dept.); and individual community volunteers.

Date: 1995-96.

4. Objective: Develop a monitoring plan that can be used as a model for future wetland restoration projects in the Laguna area.

Methods: Design monitoring plan, including appropriate monitoring protocols; develop funding.

Responsible: public agencies and non-profit organizations (Pacific Coast Joint Venture, Sonoma County Working Group); and individual community volunteers.

Date: 1995.

Future Revisions

Periodic meetings for the review of this Plan by the participants will be scheduled and organized biannually by the Laguna de Santa Rosa Foundation. The next meeting will be held in late 1996. The purpose of this meeting will be to discuss problems and accomplishments, make revisions and adjustments in the Plan, and set priorities for implementation of planned items.

We, the undersigned, have participated in the development of the Laguna de Santa Rosa Coordinated Resource Management Plan, concur with the Plan, and will act to implement it to the best of our ability.

| Name | Representing |
|------|--------------|
|------|--------------|

Appendix A

Glossary

agriculture in the Laguna: land use activities that produce food and fiber only, and protect the long-term viability of agricultural resources.

beneficial uses: uses of water that must be protected against water quality degradation; in the Laguna CRMP area they are agricultural water supply, industrial service supply, body-contact and non-contact recreation, wildlife habitat, cold and warm freshwater habitat; commercial and sport fishing; and aquaculture as listed in the Basin Plan. (Reg. W.Q.C.B. 1993.)

cultural resources: archaeological and historical sites.

biological diversity: genetic differences among individuals or population groups within a species; or the presence of a large number of species within a biotic community.

exclave: an outlying territory of one jurisdiction contained wholly within the area of another.

extirpate: to eliminate the presence of a native species from a particular location.

(natural) floodplain function: the range of values contained in a floodplain without human intervention, such as flood and sediment storage, groundwater infiltration and discharge, ecosystem support, and aesthetics; elements that must be viewed in the context of the watershed. (Interagency Fp. Mgmt. Rev. Comm. 1994, p.67.)

individual resource management plan: conservation/stewardship plan developed by a landowner (public or private) that shows how land use can be managed or modified to preserve, restore or enhance other resources. The purpose is to develop multi-objective management of individual operations consistent with the Planning and Management Objectives of this Plan.

natural resources: environmental elements existing before humans, such as plants, animals, minerals, soil, water, air.

nonpoint source discharge: the release of a water pollutant from a widespread area, such as sediment from a tilled field.

point source discharge: The release of a water pollutant from a single, discrete source, such as an industrial outfall pipe.

public trust: obligations arising from sovereign rights and responsibilities of the government to protect resource values, such as the use of watercourses for navigation, fisheries, recreation, open space, ecosystem preservation, and other similar values unique to a particular site. (Calif. St. Lands Comm. 1991)

recreation in the Laguna: the following low-intensity uses are appropriate for consideration in the CRMP area: hiking, cycling, horseback riding, non-motorized boating, birding, photography, picnicking, camping and hunting; some additional uses may be appropriate in the rural residential fringe of the CRMP area. (CRMP Task Force, 1995)

restoration in the Laguna: replanting of native species in historically appropriate locations and in large enough blocks to become self sustaining; does not mean the recreation of pre-European habitats or biotic communities.

riparian: generally, streamside; hydrologically, the area of a floodplain that is inundated, on average, at least once every 2-1/2 years; biologically, the zone transition between aquatic and terrestrial habitats that depends on inputs from both.

trail hierarchy: a range of trails for different purposes and improved to different standards; e.g., recreation trails and interpretive trails. (Hyden Assocs. 1992.)

vector: an animal that transmits a disease organism; e.g., mosquitoes, rats and ticks.

Appendix B

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